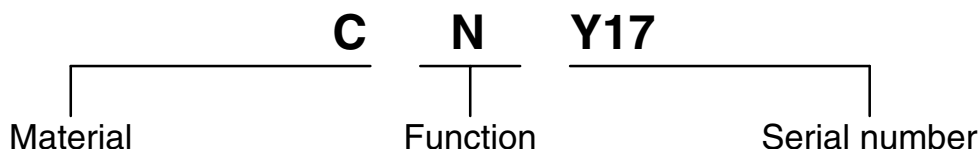


Conventions Used in Presenting Technical Data

Nomenclature for Semiconductor Devices According to Pro Electron

The type number of semiconductor devices consists of two letters followed by a serial number

For example:



17182

The **first letter** indicates the material used for the active part of the device.

- | | |
|----------|--|
| A | GERMANIUM
(Materials with a band gap 0.6–1.0 eV) ¹⁾ |
| B | SILICON ²⁾
(Materials with a band gap 1.0–1.3 eV) ¹⁾ |
| C | GALLIUM-ARSENIDE ²⁾
(Materials with a band gap > 1.3 eV) ¹⁾ |
| R | COMPOUND MATERIALS
(For instance Cadmium-Sulfide) |

The **second letter** indicates the circuit function:

- | | |
|----------|---|
| A | DIODE: detection, switching, mixer |
| B | DIODE: variable capacitance |
| C | TRANSISTOR: low power, audio frequency |
| D | TRANSISTOR: power, audio frequency |
| E | DIODE: tunnel |
| F | TRANSISTOR: low power, high frequency |
| G | DIODE: oscillator, miscellaneous |
| H | DIODE: magnetic sensitive |
| K | HALL EFFECT DEVICE: in an open magnetic circuit |
| L | TRANSISTOR: power, high frequency |

- | | |
|----------|--|
| M | HALL EFFECT DEVICE: in a closed magnetic circuit |
| N | PHOTO COUPLER ²⁾ |
| P | DIODE: radiation sensitive ²⁾ |
| Q | DIODE: radiation generating |
| R | THYRISTOR: low power |
| S | TRANSISTOR: low power, switching |
| T | THYRISTOR: power |
| U | TRANSISTOR: power, switching |
| X | DIODE: multiplier, e.g. varactor, step recovery |
| Y | DIODE: rectifying, booster |
| Z | DIODE: voltage reference or voltage regulator.
transient suppressor diode |

The **serial number** consists of:

- Three figures, running from 100 to 999, for devices primarily intended for consumer equipment
- One letter (Z, Y, X, etc.) and two figures, running from 10 to 99, for devices primarily intended for professional equipment

A version letter can be used to indicate a deviation of a single characteristic, either electrically or mechanically.

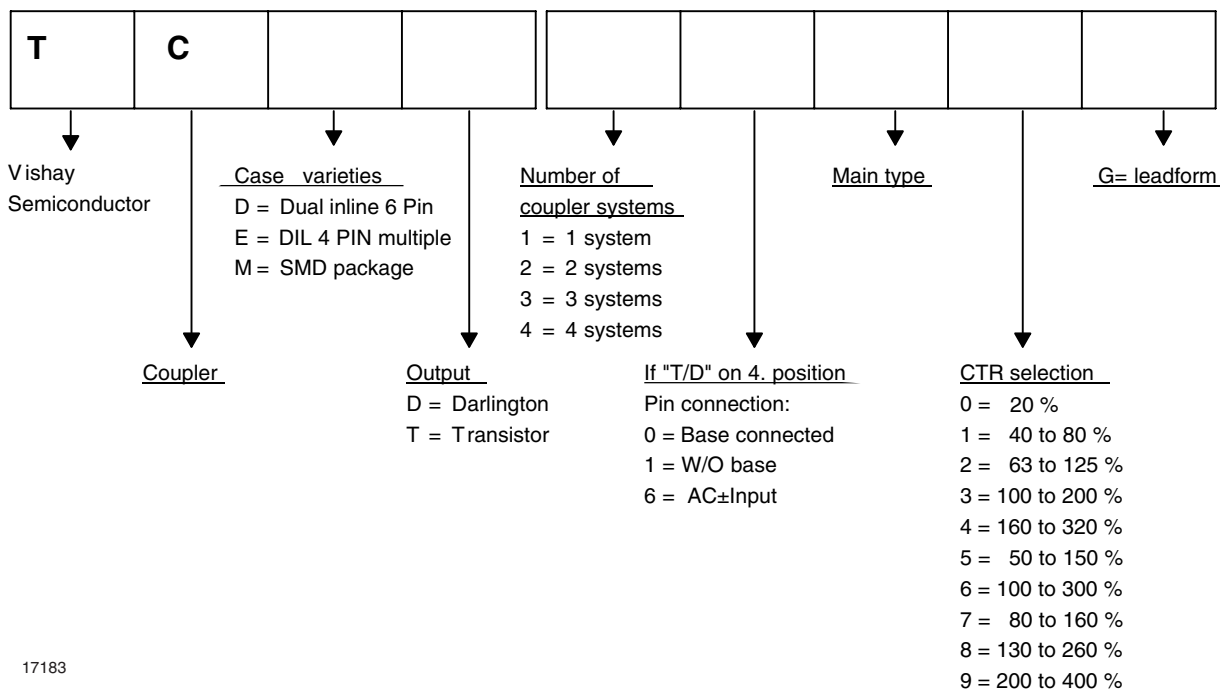
The letter never has a fixed meaning, the only exception being the letter R, indicating reversed voltage, i.e. collector to case.

¹⁾ The materials mentioned are examples

²⁾ Used for Optoelectronic products

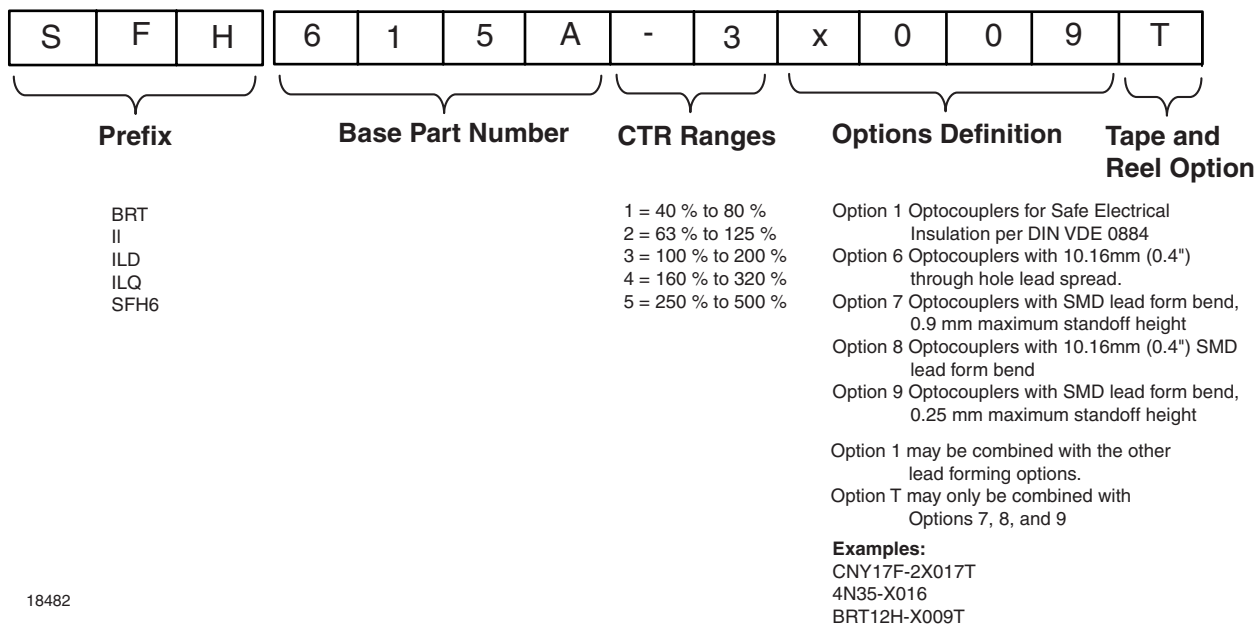
Type Designation Code for Optocouplers

Optocouplers



17183

General Optocoupler Nomenclature for BRT, IL and SFH series



18482